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(71) Applicant (for all designated States except US): **INTELLIGENT ENERGY LIMITED** [GB/GB]; Rolls House, 7 Rolls Buildings, Fetter Lane, London EC4A 1NH (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MATCHAM, Jeremy, Stephen** [GB/GB]; 11 The Hard, Elmer Sands, Bognor Regis, West Sussex PO22 6JS (GB). **GRANGE, Nathan** [GB/GB]; 1 Borough Street, Kegworth, Derby DE74 2FF (GB). **BENSON, Paul, Alan** [GB/GB]; 23 Kings Road, Shepshed, Leicestershire LE12 9HT (GB). **BAIRD, Scott** [GB/GB]; 55 Rufford Avenue, Bramcote, Nottingham NG9 3JG (GB). **KELLS, Ashley** [GB/GB]; 54 Moor Park Gardens, Dewsbury, West Yorkshire WF12

7AT (GB). **COLE, Jonathan** [GB/GB]; 16 Sileby Road, Barrow-upon-Soar, Leicestershire LE12 8LR (GB). **ADCOCK, Paul** [GB/GB]; Tudor House, 27 West End, Long Whatton, Leicestershire LE12 5DW (GB). **HOOD, Peter, David** [GB/GB]; 1026 Melton Road, Syston, Leicestershire LE7 2NN (GB). **FOSTER, Simon, Edward** [GB/GB]; 100 Mountsorrel Lane, Rothly, Leicestershire LE7 7PW (GB).

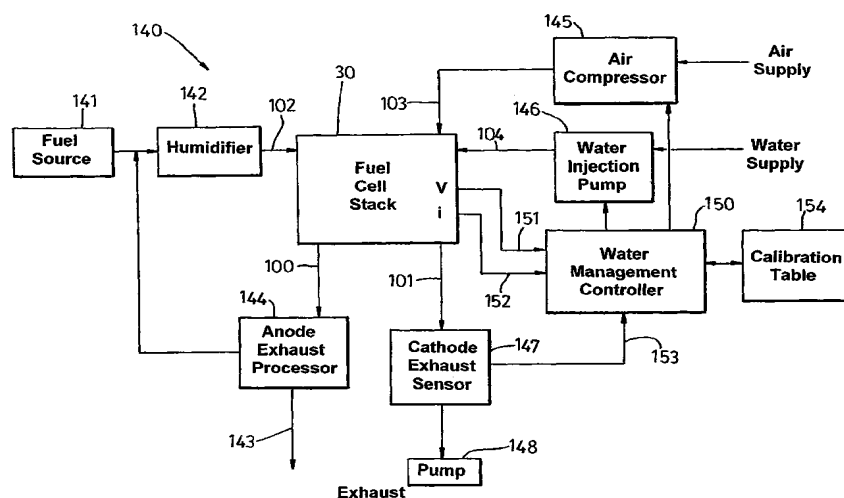
(74) Agent: **CHARIG, Raymond**; Eric Potter Clarkson, Park View House, 58 The Ropewalk, Nottingham NG1 5DD (GB).

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(54) Title: WATER MANAGEMENT IN FUEL CELLS



(57) Abstract: An electrochemical fuel cell having an anode, an ion transfer membrane and a cathode has liquid water delivered to the fluid flow channels within the cathode so as to maintain a relative humidity of 100 % throughout the fluid flow channels. A calibration method and apparatus is described for determining an optimum quantity or range of quantities of liquid water to be delivered to the cathode fluid flow channels under varying operating conditions. An operating method and apparatus is described that ensures an optimum quantity of liquid water is delivered to the cathode fluid flow channels under varying operating conditions.

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